



Maricopa County

Public Health Surveillance System Alert: January 2015

Dengue

Dengue is a mosquito-borne viral disease caused by four distinct serotypes designated as DEN 1, 2, 3, 4. Dengue is endemic in over 100 countries worldwide especially in tropical and subtropical regions; over 50 million cases occur every year. Dengue is transmitted primarily by *Aedes aegypti* mosquitoes which are plentiful in the southern half of Arizona including Maricopa County. Infected people serve as virus reservoirs for mosquitoes. Incubation period is usually 4-7 days (range 3-14 days). Common symptoms may include:

- Fever (2-7 days, sometimes biphasic)
- Headache & retro-orbital pain
- Muscle and joint pain
- Anorexia, nausea, vomiting
- Rash
- Minor hemorrhagic symptoms are possible, e.g. nosebleeds, injected eyes, etc.
- Recovery is often prolonged with fatigue and depression

In recent months, there has been a significant increase in dengue cases reported in Sonora, Mexico, including the Border communities. Maricopa County has seen an increase in imported cases, and this increases our risk for local transmission. Prompt diagnosis and reporting of suspected cases is crucial for rapidly identifying cases and preventing local transmission. Clinicians should include dengue in the differential in any patient presenting with unexplained fever, headache, and arthralgia/myalgia; especially in patients with recent travel to endemic areas. Please ask about a patient's travel history in the 14 days prior to onset. Dengue is diagnosed through detection of RNA via PCR (polymerase chain reaction) in acute serum (less than 8 days) or IgM antibodies via serologic testing in specimens collected at least 3 days post onset.

A similar mosquito-borne disease called chikungunya should also be included in the differential in patients with recent travel to Caribbean Islands (especially Puerto Rico, Haiti, and Dominican Republic), Africa, Asia, the Indian Ocean Region, and Latin American countries, including countries in Central and South America and Mexico.

For more information about dengue go to: <http://www.cdc.gov/dengue/>

For more information about chikungunya go to: <http://www.cdc.gov/chikungunya/>

To report suspect cases of dengue or chikungunya, call Maricopa County Department of Public Health @ 602-747-7111